

FIRST ENDEMIC AUSTRALIAN OECOBIIDAE AND NESTICIDAE (ARACHNIDA: ARANEAE)

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Oecobius inopinatus sp. nov. and *Nesticella chillagoensis* sp. nov. are described from Queensland, and represent the first endemic Australian species of the Oecobiidae and Nesticidae respectively. Both taxa are only known from females. □ Araneae, Nesticidae, Oecobiidae, taxonomy, Australia.

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Until now, no endemic species of Oecobiidae and Nesticidae have been described from Australia. It has not been discussed whether members of these families never reached Australia to evolve native species or whether such species are extinct. These records show that there are indeed endemics of these families in Australia: on the bark of trees (Oecobiidae) and in caves (Nesticidae). Such places are not well studied, so these - and perhaps some more related and unrelated - species have been overlooked.

Family OECOBIIDAE

AUSTRALIAN SPECIES

Oecobius navus Blackwall, 1859, (= *annulipes* auct.) cosmopolitan; *Oecobius inopinatus* sp. nov.

Oecobius inopinatus sp. nov.
(Fig. 1)

MATERIAL EXAMINED

HOLOTYPE: QMS26040, ♀, near Rockhampton, E Queensland, no exact location, on bark of trees. Coll. J. Wunderlich. July, 1992.

PARATYPES: QMS26041, 2♀, 1 juv. same data.

DIAGNOSIS

Female prosoma medially largely black (Fig. 1A), epigyne/vulva (Fig. 1B,C) with small circular hole frontally which bears genital openings, medially with strongly concave sclerotized structure, posteriorly with fissure; with large and thin-walled receptacula seminis. Male unknown.

ETYMOLOGY

Inopinatus meaning unexpected.

DESCRIPTION

Measurements (mm): body 1.8-2.0 long, prosoma: 0.6 long, 0.7 wide, leg I: femur 0.52, patella

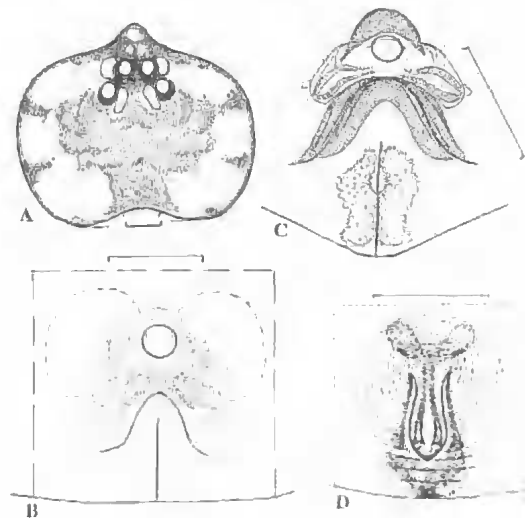


FIG. 1, A-C, *Oecobius inopinatus* sp. nov.: A, prosoma dorsally. B, epigyne. C, vulva dorsally (receptacula not shown). D, *Oecobius navus* Blackwall, 1859, epigyne. Scale = 0.1 mm.

0.2, tibia 0.4, metatarsus 0.38, tarsus 0.35, tibiae II-IV 0.4.

Colour of sternum yellow, prosoma dorsally yellow, marginally and largely medially black (Fig. 1A), chelicerae frontally with black spot, legs yellow with distinct black annulations, opisthosoma yellow to grey, dorsally with white and dark grey spots, laterally with dark spots, venter uniformly yellow, spinnerets yellow, posterior ones dorsally darkened.

Prosoma (Fig. 1A) wider than long, with large eyes, posterior median eyes reniform. Cribellum and calamistrum of normal size. Legs with some long bristles (most bristles broken off), longest under tarsus IV. Op-

isthosoma ovally, dorsoventrally depressed, covered with short hairs.

RELATIONSHIPS

This species differs from other known species in the unique conformation of the ♀ genitalia.

ECOLOGY & DISTRIBUTION

The spiders were found on the bark of trees near Rockhampton, Queensland.

Family NESTICIDAE

Nesticella chillagoensis sp. nov. (Fig. 2)

MATERIAL EXAMINED

HOLOTYPE: QMS20910, ♀, deep inside Royal Arch Cave, e.g. entrance of St Bernard, humid places under stress, near Chillagoe NEQ. Coll. D. Flett & J. Wunderlich, July 1992.

DIAGNOSIS

Female colour pale, legs with long hairs, eyes of medium size (posterior margin of posterior median eye lenses indistinct, Fig. 2A), epigyne (Fig. 2B) slightly sclerotized, ducts and receptacula seminis clearly visible; vulva (Fig. 2C). Male unknown.

DESCRIPTION

Measurements (mm): body 2.8 long, prosoma: 1.3 long, 1.15 wide, leg I: femur 2.0, patella 0.6, tibia 1.95, metatarsus 1.95, tarsus 0.8, tibia II 1.5, tibia III 1.0, tibia IV 1.7, length of some hairs: on tibia I 0.35, on the opisthosoma dorsally 0.33.

Colour pale, prosoma and legs orange, opisthosoma medium grey. Prosoma wide, with large and low groove.

Eyes (Fig. 2A) of only medium size, posterior margin of posterior median eye lenses indistinct, posterior row straight, posterior median eyes separated by slightly more than their diameter. Chelicerae large, anterior margin with 3 large teeth, posterior margin with some tiny teeth and with tiny teeth in the furrow. Labium fused to sternum, wider than long, claw of pedipalpus long, slightly bent, with numerous long teeth. - Legs of medium length, covered with long hairs, tibiae with two hair-shaped bristles(?). All metatarsi with a trichobothrium, its position on I in

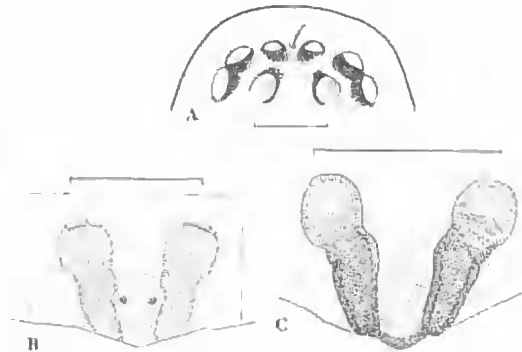


FIG. 2. A-C, *Nesticella chillagoensis* sp. nov. A, eyes dorsally. B, epigyne. C, vulva dorsally. Scale=0.2mm.

0.43. Opisthosoma ovally, dorsally covered with long hairs, colulus basally with a couple of hairs.

RELATIONSHIPS

I do not know a closely related species. This species is distinguished by the unique conformation of the female genitalia. Only few *Nesticella* species from New Guinea have been described, compare e.g. Lehtinen & Saaristo (1980). A new *Nesticella* species from north Queensland was hinted in Davies (1986: 47, fig. 76) (♂). In this epigeic (?) species, the posterior median eyes are not reduced. It is a pity that we do not know its male.

ECOLOGY & DISTRIBUTION

Considering the cave locality in north Queensland, Australia, the pale body colour and the slightly reduced posterior median eyes, the spiders seem to be trogloditic.

ACKNOWLEDGEMENTS

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LITERATURE CITED

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